

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

ET Docket No. 94-32

In the Matter of )

Allocation of Spectrum Below )  
5 GHz Transferred from )  
Federal Government Use )

TO: The Commission

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**MOTION TO ACCEPT LATE-FILED  
COMMENTS OF PROXIM, INC.**

Proxim, Inc., pursuant to Section 1.46 of the Commission's Rules, respectfully requests that its attached Reply Comments in the above-captioned matter be made a part of the record, even though its submission is being filed one business day late. The delay was caused by a last-minute problem in transmitting the comments from Proxim's offices in California to Washington, D.C. for filing.

Proxim's reply focuses on issues of importance that are unlikely to be addressed in full by other commenting parties. Proxim's reply, therefore, will provide the Commission with a more complete record, and the brief delay in submitting these comments will not prejudice the interests of other parties.

For these reasons, Proxim asks that the Commission grant this motion for late filing of its Reply Comments.

Respectfully submitted,

By:

David C. King

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January 9, 1995

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REPLY COMMENTS OF  
PROXIM, INC.

Proxim, Inc. ("Proxim") submits these reply comments in the above-referenced proceeding. As set forth below, Proxim supports retaining the use of the 2402-2417 MHz band by unlicensed Part 15 technologies and opposes auctioning this band for licensed or unlicensed services.

DISCUSSION

I. Introduction.

By way of background, Proxim has been a pioneer in the development of Part 15 unlicensed spread spectrum radio technology for data networking applications since 1988. The company was among the first to obtain FCC certification for 902 MHz spread spectrum radio products in 1989 and achieved certification for a family of 2.4 GHz wireless networking products in 1994. Proxim has emerged as both a leading provider of branded wireless LAN products under the RangeLAN and RangeLAN2 family names, as well as a major supplier of spread spectrum radio networking products to OEM customers in both the 902 MHz and 2.4 GHz frequency bands.

Over the years, Proxim's OEM customers have developed and delivered important application solutions in an extraordinary variety of areas, from patient care and medical record

keeping to retail point-of-sale automation, from real-time data collection in factories, warehouses and distribution centers to transaction processing in financial exchanges and banking, from data telemetry in transportation and public utility environments to security and public safety applications. For the past several years, Proxim has provided Part 15 unlicensed spread spectrum radio networking products to well over 200 OEM customers including such prominent companies as Compaq Computer Corporation, Fujitsu Personal Systems Inc., GRiD Computer (now AST Computer), Intermec Corporation (a subsidiary of Western Atlas Corporation), John Fluke Manufacturing Company, Trimble Navigation Ltd., and Zenith Data Systems.

## **II. The 2402-2417 MHz Band Is Essential for Part 15 Technologies.**

This reply demonstrates Proxim's support for unlicensed Part 15 technologies and the services that are based on those technologies. As noted above, Part 15 technologies make possible a tremendous number of essential commercial, educational and governmental applications as well as consumer devices such as cordless telephones, baby monitors and security systems. As indicated by the increasing number of 2.4 GHz certification applications submitted to the FCC in the past year, it is clear that many companies like Proxim have invested many man years and millions of dollars in developing products and services using this frequency band. Proxim's view is that many of these valuable products and services will be lost if the Commission introduces licensed services in the 2.4 GHz ISM band.

The 2.4 GHz band is crucial spectrum to be protected for Part 15 use given the recent authorization of this band throughout Europe and Asia for unlicensed products and services. Reducing available spectrum in this band runs contrary to the global trend to open up the 2.4 GHz frequency band for unlicensed use. Such action also sets back four years of effort by the IEEE 802.11 committee to create a worldwide wireless LAN standard.

Licensed services and unlicensed Part 15 devices cannot share the spectrum at 2402-2417 MHz easily or efficiently. Co-existence or band-sharing plans are inherently difficult to develop much less to monitor and enforce in the real world given the diversity of application environments

at issue. Because of the current difficulty of co-existing with microwave ovens and other ISM devices above 2417 MHz, access to 2402-2417 MHz is critical to making the 2400 MHz ISM band usable by Part 15 technologies. Without this 15 MHz, commercial Part 15 operation in this band would be severely diminished or impractical. Thus, adding licensed services to this portion of the band could drive many Part 15 products and services from the entire 2400 MHz ISM band, not merely from the sub-band being licensed.

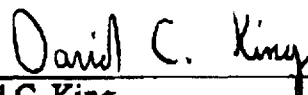
Aside from the significant loss of consumer benefits that would result, displacement of Part 15 technologies would be costly to U.S. industry and its global competitiveness. The many products and services provided by Part 15 technologies are the result of millions of dollars of investment and countless years of effort by numerous American companies. Not only would this direct investment in Part 15 technologies be lost if the 2402-2417 MHz band were reallocated for licensed services, but continued U.S. leadership in this segment of the telecommunications market would be jeopardized.

Indeed, the mere suggestion in the NPRM that Part 15 devices will be displaced has already slowed customers in moving forward with purchases of unlicensed products and services and may defer future investment in Part 15 technology. The need for a stable regulatory environment is critical to the future development of Part 15 technologies.

### III. Summary.

In summary, Proxim supports retaining unlicensed Part 15 use at 2402-2417 MHz and encourages the continued growth and vitality of this important segment of the telecommunications industry. Proxim opposes auctioning this band for licensed or unlicensed services.

Respectfully submitted,



---

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January 6, 1995

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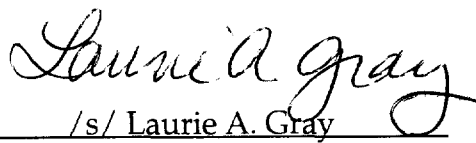
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